

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF WATER QUALITY
DECEMBER 5, 2011**

ITEM 8

SUBJECT

ANNUAL REPORT FROM THE STATEWIDE ADVISORY COMMITTEE ON COOLING WATER INTAKE STRUCTURES (SACCWIS) WITH RECOMMENDATIONS ON THE IMPLEMENTATION OF THE ONCE-THROUGH COOLING WATER POLICY

DISCUSSION

On May 4, 2010, the *State Water Resources Control Board* (State Water Board) adopted the “*Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling*” (Policy) under [Resolution No. 2010-0020](#). The Policy became effective on October 1, 2010, and was amended on July 19, 2011.

The Policy establishes uniform, technology-based standards to implement federal Clean Water Act section 316(b), which requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available (BTA) for minimizing adverse environmental impact on marine and estuarine life. Cooling water withdrawals cause adverse impacts when larger aquatic organisms, such as fish and mammals, are trapped against a facility’s intake screens (impinged) and when smaller life forms, such as larvae and eggs, are killed by being drawn through the cooling system (entrained).

The Policy is implemented through *National Pollutant Discharge Elimination System* (NPDES) permits. The Policy required the owner or operator of an affected fossil-fueled power plant to submit an implementation plan to the State Water Board by April 1, 2011. The implementation plan must identify the selected compliance alternative, describe the general design, construction, or operational measures that will be undertaken to implement the alternative, and propose a realistic schedule for implementing these measures that is as short as possible. The State Water Board has received implementation plans from all owners and/or operators as requested.

The *Statewide Advisory Committee on Cooling Water Intake Structures* (SACCWIS) was established to advise the State Water Board on the implementation of the Policy to ensure that implementation plans and schedules established by the Policy are realistic and will not cause disruption to the State’s electrical power supply. SACCWIS includes representatives from the Energy Commission (CEC), Public Utilities Commission (CPUC), Coastal Commission, State Lands Commission, Air Resources Board, Independent System Operator (ISO), and the State Water Board.

The Policy requires SACCWIS to review the submitted implementation plans and proposed schedules for the fossil-fueled power plants (the two nuclear-fueled power plants are subject to a separate study process under the Policy) and report to the State Water Board with recommendations no later than October 1, 2011, and annually thereafter. SACCWIS has, as requested, reviewed the submitted implementation plans and proposed schedules and has prepared a [report](#) for the State Water Board’s consideration. This report was adopted by SACCWIS at a public meeting on September 29, 2011 under [Resolution 2011-002](#).

In its report, SACCWIS recommends that the State Water Board modify its statewide policy as follows:

- Develop a compliance schedule on a unit-by-unit basis at existing power plants and on a facility-wide basis; and
- Require generators to supplement their implementation plans at least annually as new information becomes available.

The SACCWIS report does not make recommendations on changes to the Policy's compliance deadlines, as the SACCWIS does not currently have sufficient information to do so. The ISO, in collaboration with the CPUC and the CEC, is conducting a comprehensive, multi-year local capacity area study that will extend to 2021 and will provide a better foundation for assessing compliance dates in the Policy with local capacity needs. The analyses will include both the use of power flow study cases and the [Load and Resource Scenario Analysis Screening Tool](#) developed by the ISO, CPUC and CEC. The results will serve as the basis for advising the State Water Board of the need for changes to the compliance schedule by March 31, 2012, when the next SACCWIS report is due.

Two load levels will be evaluated: (1) a high-net load scenario in which the CEC-adopted load forecast from the *2009 Integrated Energy Policy Report* will be used; and (2) a mid-net load scenario used in the CPUC's long term procurement planning process. The ISO will evaluate two generation scenarios: (1) minimum generation requirements to meet local, zonal and system reliability needs; and (2) modeling of the generators' implementation plans submitted under the statewide policy. The analyses include four renewable energy portfolio standard scenarios. Power plants subject to the Policy could play a useful role in other dimensions, such as providing low cost energy, ancillary services, or helping to integrate renewable resources by ramping up and down each day to complement the production profile of wind and solar resources, even if they are not required for local capacity purposes.

SACCWIS' review of the implementation plans submitted by the generators has resulted in several additional observations that SACCWIS urges the State Water Board to consider:

- The State Water Board will need to request additional information from the generators;
- The implementation plans reflect the presumption that California should preserve all generating capacity from facilities subject to the Policy;
- The implementation plans reflect the presumption that Track 2 compliance measures under the Policy can succeed.
- The need for the CPUC to authorize procurement by investor-owned utilities.

The State Water Board's recently adopted [amendment to the Policy](#) to address the compliance schedules for Los Angeles Department of Water and Power (LADWP) facilities provides in part that the State Water Board will consider further modifications to the compliance dates for certain LADWP power-generating units when LADWP submits information in response to any requests SACCWIS makes by January 1, 2012. SACCWIS may also recommend revisions to the Policy's implementation schedule based on any information it receives from LADWP.

SACCWIS believes the State Water Board can address the recommendations set forth in their adopted report and any recommended modifications to the implementation schedule SACCWIS makes by March 31, 2012, as part of a consolidated process during the second and third quarters of 2012.

POLICY ISSUE

None at this time; informational item.

FISCAL IMPACT

None at this time; informational item.

REGIONAL BOARD IMPACT

None at this time; informational item.

STAFF RECOMMENDATION

None at this time; informational item.

State Water Board action on this item will assist the Water Boards in reaching Goal 1 of the Strategic Plan Update: 2008-2012 to fully support the beneficial uses for all 2006-listed water bodies by 2030. In particular, approval of this item will assist in fulfilling Objective/Action 1 to prepare, adopt, and take steps to carry out TMDLs, designed to meet water quality standards, for all impaired water bodies on the 2006 list.